Air Quality Event Summary
September 14, 2005

Unhealthy levels of air quality occurred on September 14th as temperatures reached the high 80s across the state and skies were cloudless, though hazy for a good part of the day. Both particle pollution ($PM_{2.5}$) and ozone levels were elevated across much of the state and Miller State Park and Mt. Washington summit both recorded exceedances of the 8-hour ozone standard. Miller actually had two separate 8-hr exceedances, one ending at 5 am and a second one ending at 2 pm. The highest concentration recorded at that site was 87 ug/m^3. The 8-hour ozone standard is 85 ug/m^3.

The table below shows the highest ozone and $PM_{2.5}$ concentrations for the September 14th event. Further below are streamlines for the afternoon event, along with maximum 8-hour ozone levels and 24-hr $PM_{2.5}$ levels. The map of the ozone distribution shows that western Massachusetts and NH were the only two New England states with exceedances on this day. The previous two days saw numerous exceedances of the ozone standard south of the New Hampshire border.

The streamline map shows a generally southerly wind bringing pollutants up from points further south, though south of New York City the wind is more easterly, coming in from over the ocean. This resulted in cleaner air over southern New England and good air quality through most of NY, NJ and PA. The southerly winds also kept midwest sources from significantly influencing the northeast. The exceedances therefore appear to be due to a more regional transport situation with the New York City plume causing the high ozone levels. The increased onshore winds on the 14th also caused a decrease in $PM_{2.5}$ concentrations over southern New England.

Maximum Ozone and $PM_{2.5}$ Concentrations
September 14, 2005

Ozone

monitor	1-hr avg. max ppb	8-hr avg. max ppb
Camp Dodge	74	64
Claremont	75	64
Concord	92	77
Hubbard Brook	81	54
Keene	82	75
Laconia	88	78
Lebanon	83	72
Manchester	88	72
Miller	105	87
Mt Washington	89	86
Nashua	97	84
Odiorne	84	63
Pittsburg	68	59
Portsmouth	84	68

1-hr exceedance is> 124ppb
8-hr exceedance is > 84 ppb

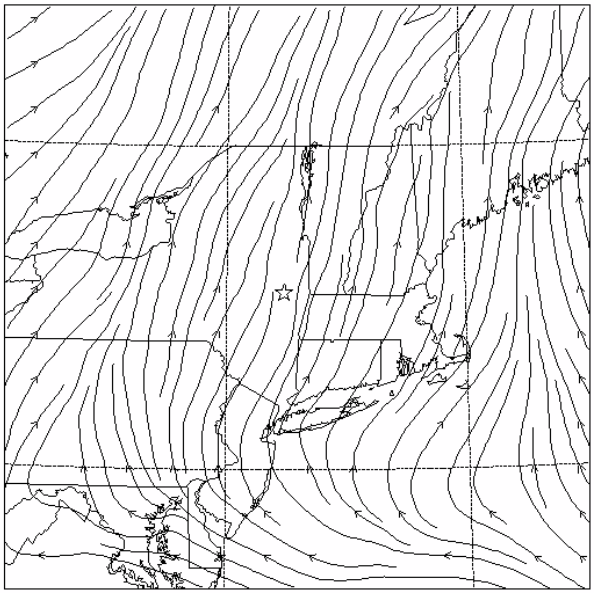
Particle Pollution ($PM_{2.5}$)

monitor	1-hr avg. max ug3	24-hr avg max ug3
Manchester	44	29
Portsmouth	76	27
Miller	47	31
Lebanon	50	32
Camp Dodge	34	18

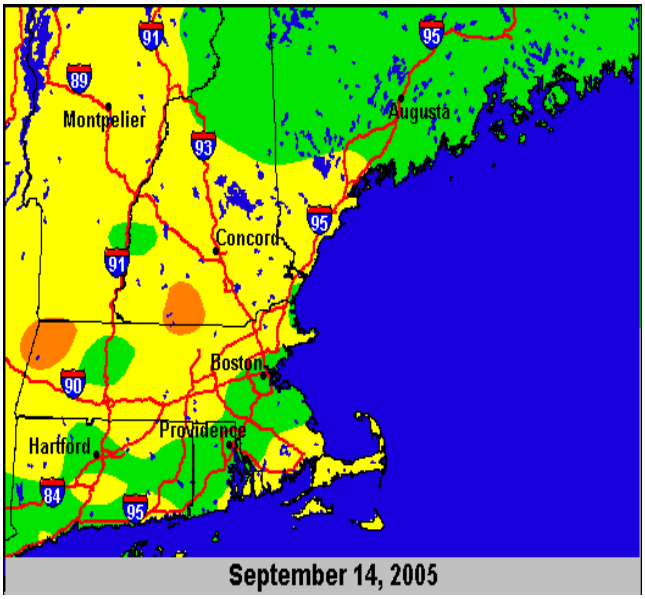
no 1-hour standard

24-hr exceedance is > 65.5 ug/m3

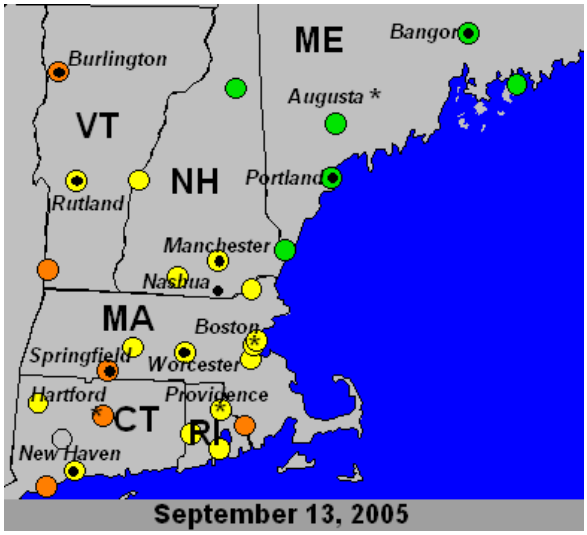
Streamlines
September 14th

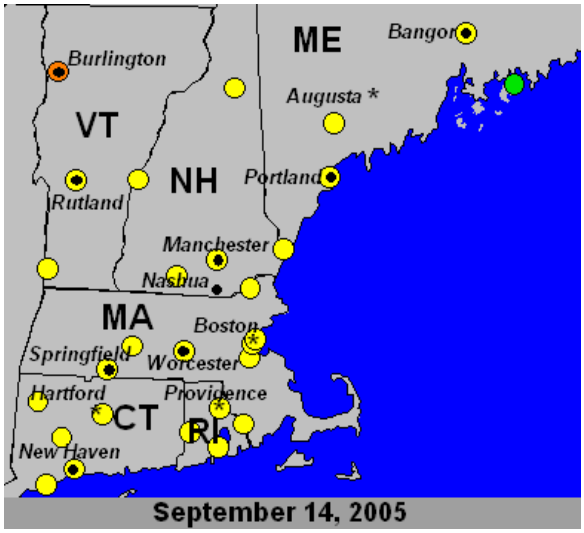


Maximum Ozone Levels
September 14th



PM 2.5 (24-hr Averages)
September 13th and 14th, 2005





Air Quality Index (AQI) Values	Levels of Health Concern	Colors
When the AQI is in this range:	*...air quality conditions are:*	*...as symbolized by this color:*
0 to 50	Good	Green
51 to 100	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red